least one storage unit are on a single chip.

B2 CONCL.

No fees are due, however, if any fee is due the undersigned hereby authorizes the Untied States Patent and Trademark Office to charge the fees to Deposit Account 04-100.

Attached hereto is a marked-up version of the changes made by the current amendment. The attached pages are captioned "Version with Markings to Show Changes Made".

REMARKS

Applicants request entry of the Preliminary Amendment.

The present application is a continuation application of 09/010,859, filed January 22, 1998 in which claims 1-6 and 19-31 were allowed and claims 7-14 and 15-18 were rejected. Claims 7-14 and 15-18 were cancelled from 09/010,859, allowing the remaining claims to issue.

The present amendment cancels the previously allowed claims 1-6 and 19-31, without prejudice or disclaimer, and responds to the outstanding rejections to claims 7-14 and 15-18 from the Office Action of March 23, 2001 of 09/010,859.

Claim Objections

35 U..S.C. §112 Rejections

Claims 7-14 were rejected under 35 U.S.C. §112, second paragraph as being indefinite, due to lack of antecedent basis of claim 7.

Claim 7 has been amended to solve the antecedent basis problem. Applicants note that this amendment to the claims is not in response to a prior art rejection.

Applicants request withdrawal of the rejection under § 112.

35 U.S.C. § 102 Rejections

Claims 7-14 were rejected under 35 U.S.C. §102(b) as being anticipated by Dixit (US 5,260,783).

Applicants respectfully traverse the rejections because Dixit fails to disclose all elements of claim 7. In particular, Dixit is silent as to "A motion estimation processor". As the Examiner notes, Dixit discloses a layered DCT video coder. As Dixit says (col. 5, lines 16-23):

"Each of the Y-, I- and Q-component encoded difference frames output from encoder 68 is passed through a layered discrete cosine transform (DCT) 76 which separate the video information present in each difference frames into layers of DCT coefficients based opon resolution, ranging from a low-resolution DCT layer containing basic image information, to a high-resolution DCT layer containing detailed image information.

The DCT operation is an encoding operation and is not motion estimation or analysis.

The Examiner indicates that Fig. 6 and col. 9, lines 3-24 of Dixit show motion analysis. Applicants respectfully disagree. Fig. 6 shows multi resolution data but no motion analysis. The cited text discusses how to use the different resolution data but there is no discussion of motion estimation or analysis.

Based on the above, Applicants respectfully assert that the rejection to claim 7 should be withdrawn. Claims 8-14 are dependent from claim 7. Applicants, therefore, respectfully assert that the rejections of these claims should be withdrawn by virtue of the patentability of the independent claims upon which they depend.

Claims 15-18 were rejected under 35 U.S.C. §102(e) as being anticipated by Van der Wal et al. (US 6,188,381).

Applicants respectfully traverse the rejections because Van de Wal et al. fail to disclose all elements of claim 15. In particular, Van de Wal et al. show a multi-board vision system while the present invention recites "A digital signal processor for processing a multiple frame video digital signal, comprising, on a single chip".

Based on the above, Applicants respectfully assert that the rejection to claim 15 should be withdrawn. Claims 15-18 are dependent from claim 15. Applicants, therefore, respectfully assert that the rejections of these claims should be withdrawn by virtue of the patentability of the independent claims upon which they depend.

In view of the above amendments and remarks it is submitted that the application is now in condition for allowance and that all rejections have been overcome. Prompt notice of allowance of claims 7-18 is respectfully requested.

Should the Examiner have any question or comment as to the form or content of this Amendment, the Examiner is requested to contact the undersigned at the telephone number below. Similarly, if there are any further issues yet to be resolved to advance the prosecution of this application to issue, the Examiner is requested to telephone the undersigned counsel.

Respectfully submitted,

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Customer No.: 07278
PATENT TRADEMARK OFFICE

Docket No: 0866/1D996US1

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Amir MORAD; Leonid YAVITS

Serial No.: 09/988,878 Art Unit: 2613

Confirmation No.: 9165

Filed: November 19, 2001 Examiner: N. Diep

For: VIDEO ENCODING DEVICE

VERSION WITH MARKINGS TO SHOW CHANGES MADE

Hon. Commissioner of
Patents and Trademarks
Washington, DC 20231

January 25, 2002

Sir:

7. A motion estimation processor comprising a controller and a plurality of resolution processors, connected to said controller,

said plurality of resolution processors analyzing the development of [said]

a video signal in time, thereby producing motion analysis,

said controller controlling said plurality of resolution processors.

15. A digital processor for processing a multiple frame video digital signal, comprising:

a DSP controller,

a plurality of processing units connected to said DSP controller for processing said multiple frame video digital signal; and

at least one storage unit, wherein each of said processing units is connected to at lest one of said at least one storage units,

said DSP controller controlling said plurality of processing units,

wherein said DSP controller, said plurality of processing units and said at least one storage unit are on a single chip.